

7. Combahee River (Borrow pit)

(Colleton County)

1. Problem plant species
Alligatorweed, Parrot feather, Frog's bit
2. Management objective
Reduce or remove alligatorweed infestation at public access points, the main river channel, and connecting lakes.
3. Selected control method

<u>Problem Species</u>	<u>Control Agent</u>
Alligatorweed	Renovate 3, Habitat
Frog's bit, Parrot feather	Reward
4. Area to which control is to be applied
10 acres of problematic plants to be treated 2 times during the growing season.
5. Rate of control agent to be applied
Reward - 0.5 gallon per acre.
Renovate 3 - 0.50-0.75 gallons per acre.
Habitat - up to 4 pints per acre/up to 6 pints per acre.
6. Method of application of control agent
Spray on surface of foliage with appropriate surfactant.
7. Timing and sequence of control application
Apply when plants are actively growing (May - Oct.).
8. Other control application specifications
None
9. Entity to apply control agent
Commercial applicator
10. Estimated cost of control operations
\$1,928

11. Potential sources of funding

Colleton County 50%

U.S. Army Corps of Engineers 0%

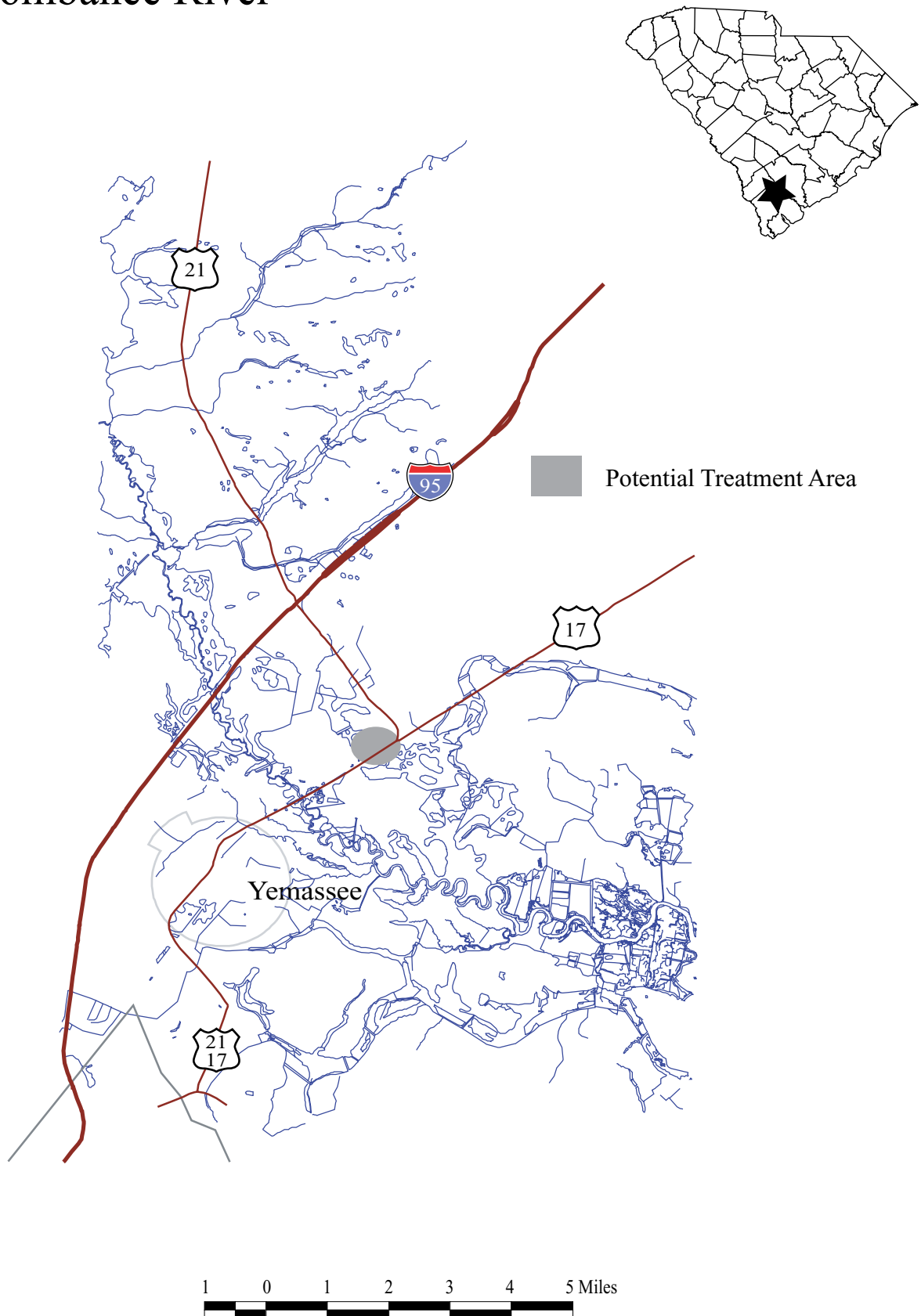
S. C. Department of Natural Resources 50%

(Percentage of match subject to change based on availability of Federal and State funding.)

12. Long term management strategy

- a. Manage the distribution and abundance of nuisance aquatic plant populations at levels that minimize adverse impacts to water use activities and the environment through the use of federal and state approved control methods.
- b. Maintain or enhance native aquatic plant populations at levels beneficial to water use, water quality, and fish and wildlife populations through selective control of nuisance plant populations where feasible, introduction of native plant species where appropriate, and public education of the benefits of aquatic vegetation in general.
- c. Seek to prevent further introduction and distribution of problem species through public education, posting signs at boat ramps, regular surveys of the water body, and enforcement of existing laws and regulations.
- d. Continue to coordinate treatment areas with local conservation groups.

Combahee River



8. Cooper River

(Berkeley County)

1. Problem plant species
Hydrilla, Water hyacinth, Water primrose
2. Management objectives
 - a. Reduce water hyacinth populations to the greatest extent possible in the main river and public ricefields.
 - b. Reduce water primrose growth along boat channels to maintain navigation.
 - c. Open limited boat trails in hydrilla infested ricefields to enhance public access to the river and selected ricefields.
3. Selected control method

<u>Problem Species</u>	<u>Control Agent</u>
Water hyacinth	Renovate 3, Reward
Water primrose	Renovate 3, Reward, Habitat
Hydrilla	Chelated copper*

*** May be toxic to fish at recommended treatment rates; however, precautions will be implemented to minimize the risk of fish kills.**
4. Area to which control is to be applied

Renovate 3, Reward, Habitat - 500 acres of water hyacinth and water primrose throughout river system and in narrow boat channels in French Quarter Creek, Rice Hope Plantation ricefield, and Berkeley Yacht Club ricefield.

Chelated copper - 75 acres (37.5 acres treated twice yearly, spring and fall) to open boat trails in Pimlico, Berkeley Yacht Club and Rice Hope Plantation ricefields.
5. Rate of control agents to be applied

Reward - 0.5 gallon per acre.

Renovate 3 - 0.50-0.75 gallons per acre.

Chelated copper - up to 1 ppm (about 16 gallons per acre).

Habitat - 2-3 pints per acre.
6. Method of application of control agent

Renovate 3, Reward, Habitat- spray on surface of foliage with appropriate surfactant.

Chelated copper - subsurface injection from airboat.

7. Timing and sequence of control application

All agents to be applied when plants are actively growing. Renovate 3 treatments to be conducted in early spring with subsequent Reward maintenance treatments throughout the year. Chelated copper treatment of boat trails to be conducted as close to low tide as possible to minimize water movement.

8. Other control application specifications

None

9. Entity to apply control agent

Commercial applicator

10. Estimated cost of control operations

\$69,125

11. Potential sources of funding

Berkeley County 50%

U.S. Army Corps of Engineers 0%

S. C. Department of Natural Resources 50%

(Percentage of match subject to change based on availability of Federal and State funding.)

12. Long term management strategy

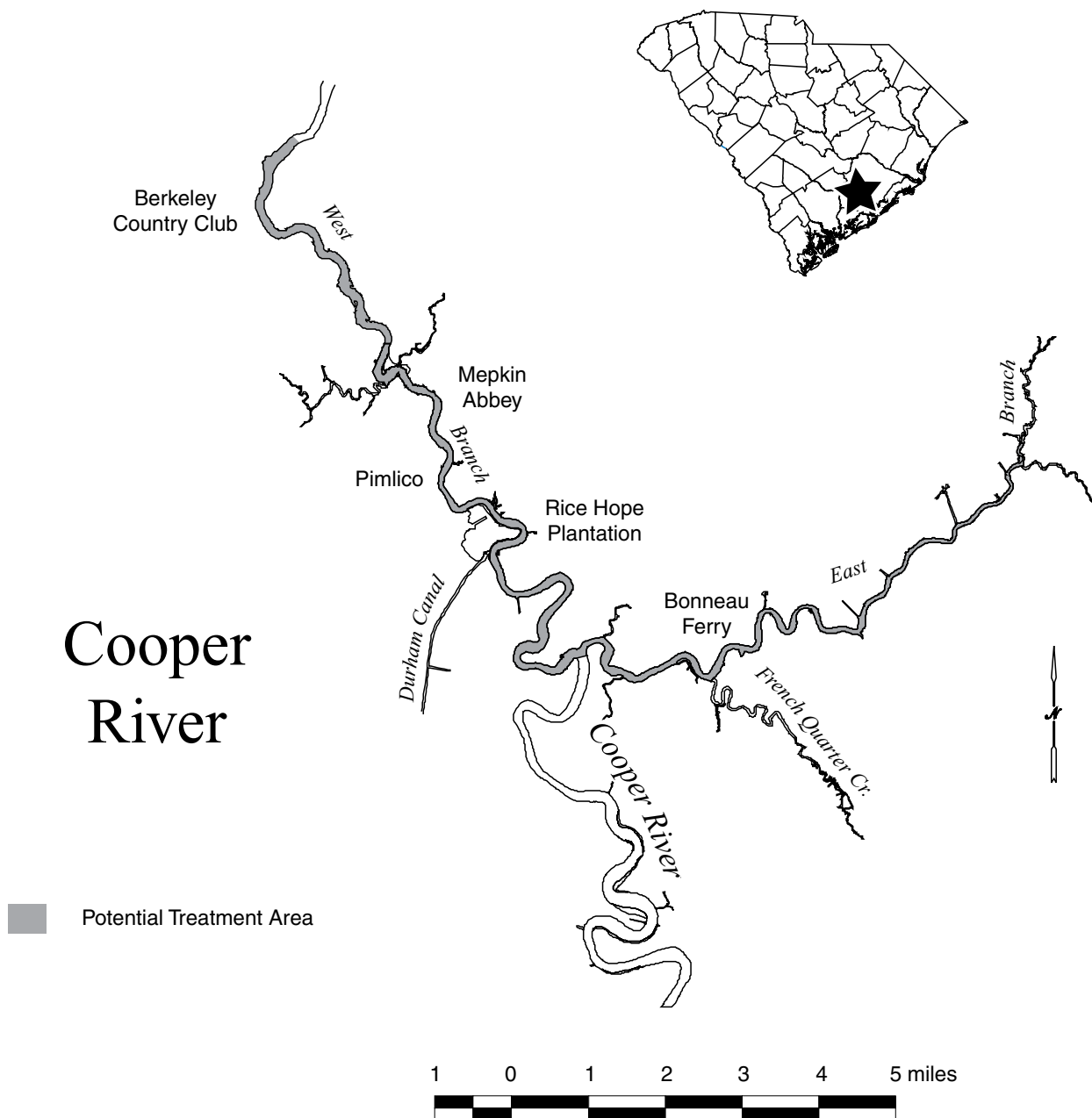
a. Manage the distribution and abundance of nuisance aquatic plant populations at levels that minimize adverse impacts to water use activities and the environment through the use of federal and state approved control methods.

b. Maintain or enhance native aquatic plant populations at levels beneficial to wateruse, water quality, and fish and wildlife populations through selective control of nuisance plant populations where feasible, introduction of native plant species where appropriate, and public education of the benefits of aquatic vegetation in general.

c. Seek to prevent further introduction and distribution of problem species through public education, posting signs at boat ramps, regular surveys of the water body, and enforcement of existing laws and regulations.

d. Long term management must include consideration of water hyacinth control in many privately owned ricefields to which the public does not have boat access. Water hyacinth from these ricefields can reinfest public areas.

Cooper River



9. Donnelley WMA/Bear Island WMA/ACE Basin

(Colleton County)

- | | | | | | | | | | | | | |
|-----------------------------|--|--|------------------------|-------------------|------------------------|----------------------|------------|---------------------|-----------------------|---------|-----------------------------|---------|
| 1. | Problem plant species | Frog's bit
Cutgrass | Cattails
Phragmites | Swamp loosestrife | | | | | | | | |
| 2. | Management objective | Reduce problem plant populations to enhance waterfowl habitat, public access and use. | | | | | | | | | | |
| 3. | Selected control method | <table border="0"> <tr> <td><u>Problem Species</u></td> <td><u>Control Agent</u></td> </tr> <tr> <td>Frog's bit</td> <td>Renovate 3, Habitat</td> </tr> <tr> <td>Phragmites, Cattails,</td> <td>Habitat</td> </tr> <tr> <td>Cutgrass, Swamp loosestrife</td> <td>Habitat</td> </tr> </table> | | | <u>Problem Species</u> | <u>Control Agent</u> | Frog's bit | Renovate 3, Habitat | Phragmites, Cattails, | Habitat | Cutgrass, Swamp loosestrife | Habitat |
| <u>Problem Species</u> | <u>Control Agent</u> | | | | | | | | | | | |
| Frog's bit | Renovate 3, Habitat | | | | | | | | | | | |
| Phragmites, Cattails, | Habitat | | | | | | | | | | | |
| Cutgrass, Swamp loosestrife | Habitat | | | | | | | | | | | |
| 4. | Area to which control is to be applied | 40 acres of Frog's bit, Phragmites, Cattails, Cutgrass, and Swamp loosestrife throughout the area. | | | | | | | | | | |
| 5. | Rate of control agent to be applied | Renovate 3 - 0.5 - 0.75 gallons per acre
Habitat - 2-3 pints per acre. | | | | | | | | | | |
| 6. | Method of application of control agent | Spray on surface of foliage with appropriate surfactant. | | | | | | | | | | |
| 7. | Timing and sequence of control application | Renovate 3, Habitat - Apply when plants are actively growing. | | | | | | | | | | |
| 8. | Other control application specifications | Application to be conducted by airboat and helicopter. | | | | | | | | | | |
| 9. | Entity to apply control agent | Commercial applicator | | | | | | | | | | |
| 10. | Estimated cost of control operations | \$6,080 | | | | | | | | | | |

11. Potential sources of funding

Donnelley WMA/USF&W 50%

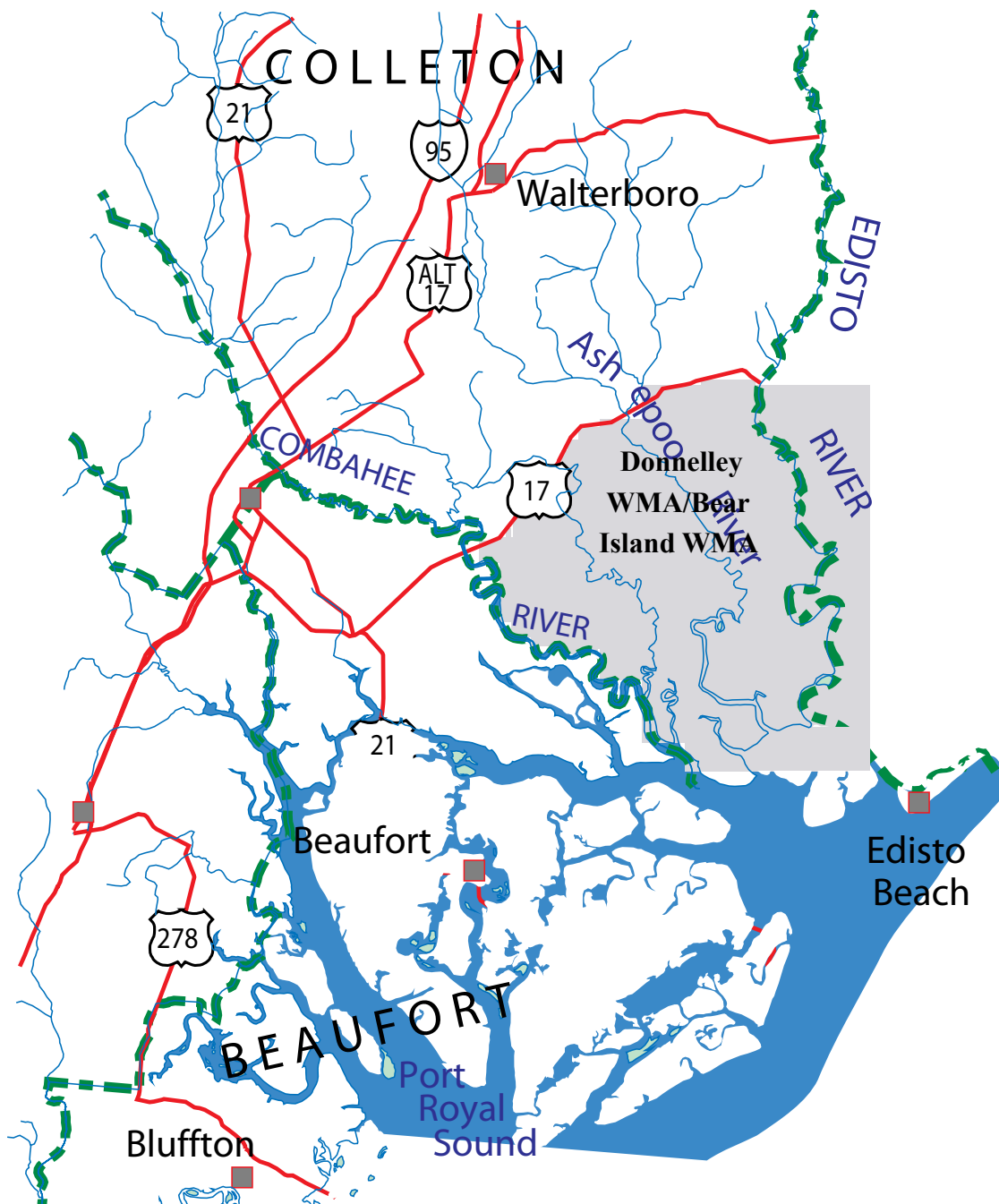
S. C. Department of Natural Resources 50%

(Percentage of match subject to change based on availability of Federal and State funding.)

12. Long term management strategy

- a. Manage the distribution and abundance of nuisance aquatic plant populations at levels that minimize adverse impacts to water use activities and the environment through the use of federal and state approved control methods.
- b. Maintain or enhance native aquatic plant populations at levels beneficial to water use, water quality, and fish and wildlife populations through selective control of nuisance plant populations where feasible, introduction of native plant species where appropriate, and public education of the benefits of aquatic vegetation in general.

Donnelley/Bear Island



10. Dungannon Plantation Heritage Preserve

(Charleston County)

1. Problem plant species

Frog's bit	Cattails	Bur Marigold
Cutgrass	Water Primrose	Swamp loosestrife
2. Management objective

Reduce problem plant populations to enhance Wood stork nesting habitat, public access and use.
3. Selected control method

<u>Problem Species</u>	<u>Control Agent</u>
Frog's bit, Water primrose,	
Bur marigold	Renovate 3, Habitat
Cattails,	Habitat
Cutgrass, Swamp loosestrife	Habitat
4. Area to which control is to be applied

12 acres of Frog's bit, Water primroses, and Bur marigold
12 acres of Cattails, Cutgrass, and Swamp loosestrife throughout the area.
5. Rate of control agent to be applied

Renovate 3 - 0.5 - 0.75 gals. per acre.
Habitat - 0.250-0.375 gals. per acre.
6. Method of application of control agent

Spray on surface of foliage with appropriate surfactant.
7. Timing and sequence of control application

Renovate 3, Habitat - Apply when plants are actively growing.
8. Other control application specifications

Application to be conducted by airboat and jon-boat.
9. Entity to apply control agent

Commercial applicator
10. Estimated cost of control operations

\$2,952

11. Potential sources of funding

Donnelley WMA/USF&W 50%

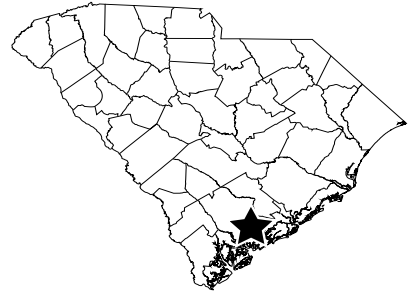
S. C. Department of Natural Resources 50%

(Percentage of match subject to change based on availability of Federal and State funding.)

12. Long term management strategy

- a. Manage the distribution and abundance of nuisance aquatic plant populations at levels that minimize adverse impacts to water use activities and the environment through the use of federal and state approved control methods.
- b. Maintain or enhance native aquatic plant populations at levels beneficial to water use, water quality, and fish and wildlife populations through selective control of nuisance plant populations where feasible, introduction of native plant species where appropriate, and public education of the benefits of aquatic vegetation in general.
- c. Enhance aquatic plant communities to benefit waterfowl and to increase nesting activities of Wood storks and other waterfowl.

Dungannon Plantation HP



11. Goose Creek Reservoir

(Berkeley County)

1. Problem plant species

Water hyacinth
Water lettuce

Water primrose
Hydrilla

2. Management objective

- a. Reduce water hyacinth and water lettuce populations to the greatest extent possible throughout the lake.
- b. Reduce water primrose, water lettuce and water hyacinth in the upper portion of the lake to enhance water flow and public access.
- c. Reduce hydrilla growth throughout the lake to minimize its spread within the lake, help prevent its spread to adjacent public waters, and minimize adverse impacts to public use and access.
- d. Maintain diverse aquatic plant community through selective application of control methods.

3. Selected control method

Problem Species

Water primrose
Water hyacinth
Water lettuce
Hydrilla

Control Agent

Renovate 3, Habitat
Renovate 3, Reward
Renovate 3, Reward
Aquathol K, chelated copper,
Triploid grass carp

4. Area to which control is to be applied

Renovate 3, Habitat - 50 acres water primrose in upper lake and boat ramp.

Reward - 100 acres of water hyacinth and water lettuce throughout lake.

Renovate 3 - 100 acres of water hyacinth and water lettuce throughout lake.

Release triploid grass carp in areas of the lake with greatest hydrilla growth.
Grass carp will be released in selected areas, such as boat ramps and park sites, around the lake to achieve as even a distribution as practicable.

5. Rate of control agents to be applied

Renovate 3 - 0.50-0.75 gallons per acre.

Reward - 0.5 gallon per acre.

Habitat - 2-3 pints per acre.

*Triploid Grass Carp - 185 fish in the entire reservoir

*Based on models the number of Triploid grass carp introduced on a maintenance stocking plan needs to be 185 fish in year one and 84 fish per year in subsequent years to keep the total number of fish at 280.

6. Method of application of control agents

Renovate 3, Habitat, Glyphosate, Reward - spray on surface of foliage with appropriate surfactant.

Triploid grass carp – Using standard techniques to minimize loss, stock sterile grass carp in areas of the lake with the greatest hydrilla growth.

7. Timing and sequence of control application

All agents to be applied when plants are actively growing.

Triploid grass carp to be released as soon as possible in the spring of 2007 (March-May). RESULTS FROM GRASS CARP MAY NOT BE EVIDENT FOR TWO OR MORE YEARS.

8. Other control application specifications

Treatment of the control area is to be conducted in a manner that will not significantly degrade water quality. This may require that only a portion of the control area be treated at any one time. Coordinate all control operations with Charleston Commissioners of Public Works and Goose Creek Reservoir Watershed Task Force.

If available, all sterile grass carp will be a minimum of 12 inches in length. Sterile grass carp shipments for Goose Creek Reservoir will be certified by the SCDNR for sterility and checked for size and condition prior to stocking in the lake.

Hydrilla is slowly increasing in acreage along with other submerged species. Hydrilla populations will be carefully monitored and in the event that significant regrowth occurs during the year the Aquatic Plant Management Council may consider the need for additional grass carp or treat with herbicides to give short-term control as needed.

9. Entity to apply control agents

Herbicides - Commercial Applicator

Triploid Grass Carp - S.C. Public Service Authority and/or a commercial supplier with supervision by the SCDNR.

10. Estimated cost of control operations

\$29,819

11. Potential sources of funding

Charleston Commissioner of Public Works 50%

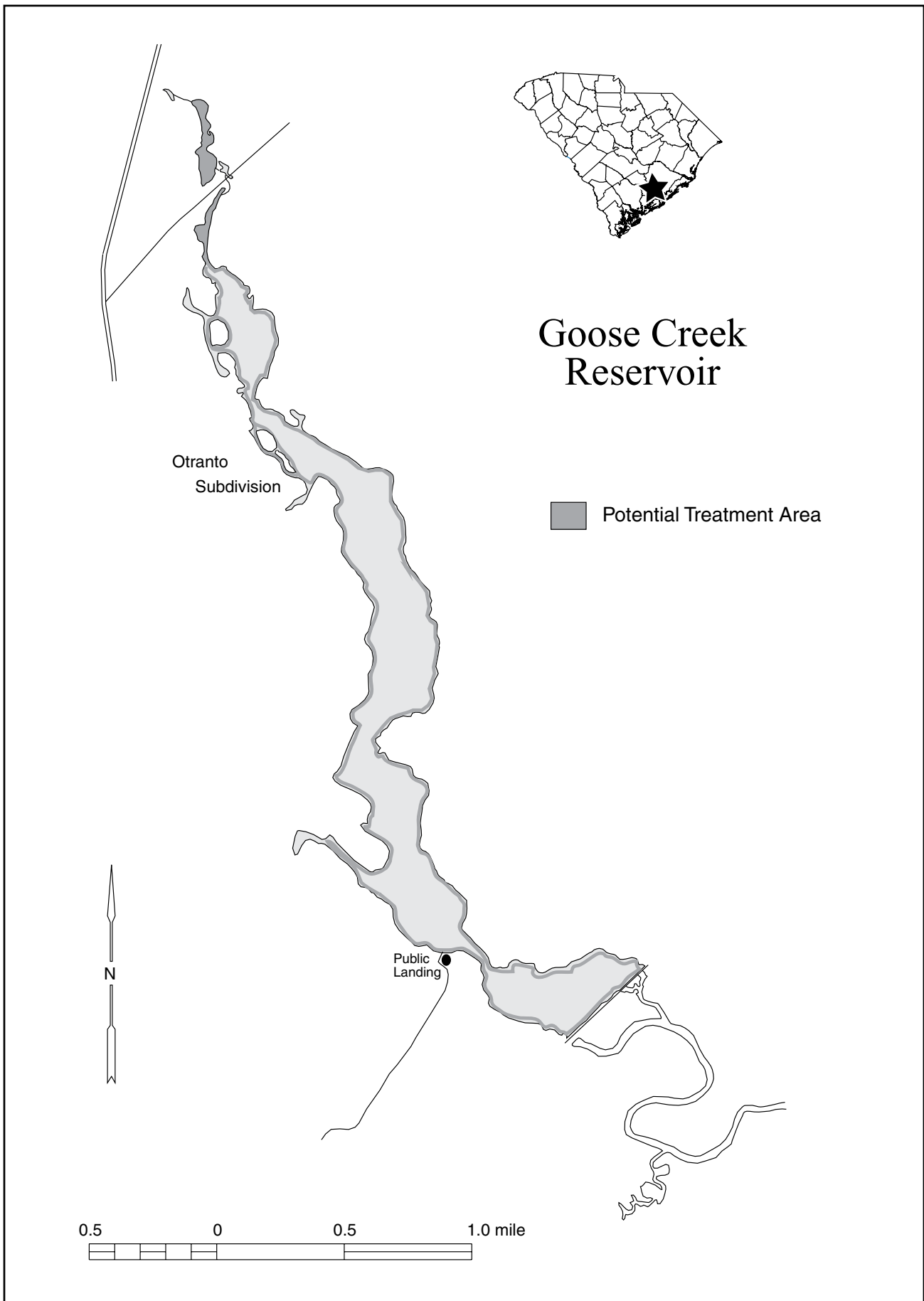
U.S. Army Corps of Engineers 0%

S. C. Department of Natural Resources 50%

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12. Long term management strategy

- a. Manage the distribution and abundance of nuisance aquatic plant populations at levels that minimize adverse impacts to water use activities and the environment through the use of federal and state approved control methods.
- b. Maintain or enhance native aquatic plant populations at levels beneficial to water use, water quality, and fish and wildlife populations through selective control of nuisance plant populations where feasible, introduction of native plant species where appropriate, and public education of the benefits of aquatic vegetation in general.
- c. Seek to prevent further introduction and distribution of problem species through public education, posting signs at boat ramps, regular surveys of the water body, and enforcement of existing laws and regulations.



12. Lake Darpo

(Darlington County)

1. Problem plant species
 - Water lily
 - Milfoil
2. Management objectives
 - Reduce problem plant populations to enhance waterfowl habitat, public access and use.
3. Selected control method

<u>Problem Species</u>	<u>Control Agent</u>
Water lily, milfoil	Hardball, granular 2,4-d
4. Area to which control is to be applied
 - Hardball - 10 acres of Milfoil infestation.
 - Granular 2,4-d - 2 acres of Waterlily
5. Rate of control agents to be applied
 - Hardball - up to 5 gallons per acre
 - Granular 2,4-d - 200 pounds per acre
6. Method of application of control agents
 - Hardball - spray on surface of foliage with appropriate surfactant. Application by airboat with adjuvant two(2) times per year.
 - Granular 2,4-d - broadcast with spreader two(2) times per year.
7. Timing and sequence of control application
 - Agent to be applied when plants are actively growing.
8. Other control application specifications
 - Treatment of control area is to be conducted in a manner that will not significantly degrade water quality.
 - Milfoil may require multiple treatments.
9. Entity to apply control system
 - Commercial applicator

9. Entity to apply control system
Commercial applicator

10. Estimated cost of control operations
\$5,986

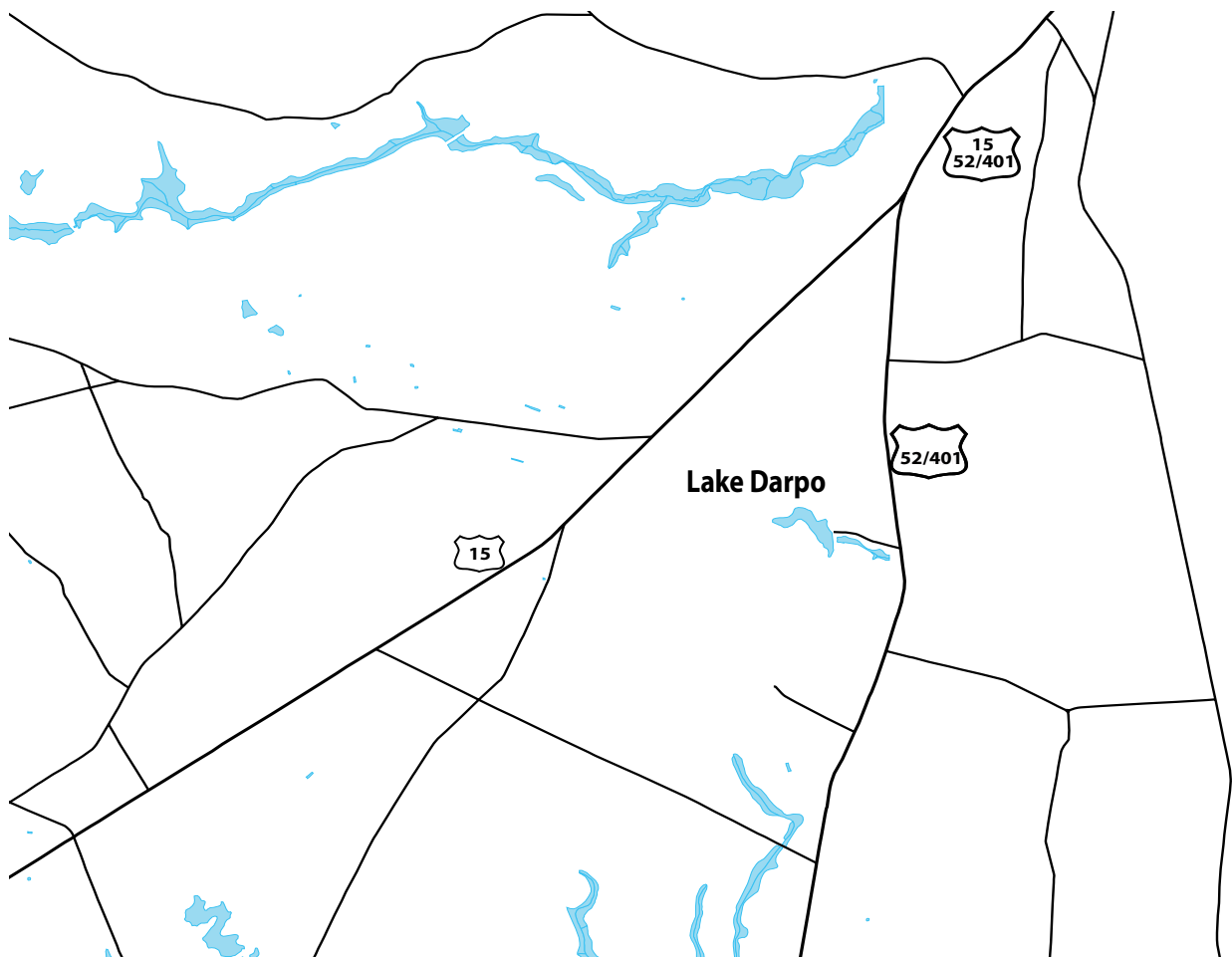
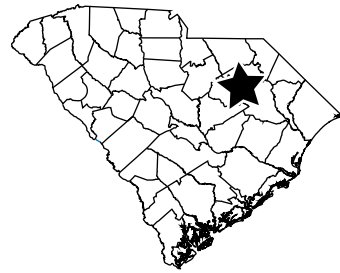
11. Potential sources of funding
Darlington County Rec Department 50%
U.S. Army Corps of Engineers 0%
S. C. Department of Natural Resources 50%

(Percentage of match subject to change based on availability of Federal and State funding.)

12. Long term management strategy

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- b. Maintain or enhance native aquatic plant populations at levels beneficial to water use, water quality, and fish and wildlife populations through selective control of nuisance plant populations where feasible, introduction of native plant species where appropriate, and public education of the benefits of aquatic vegetation in general.
- c. Seek to prevent further introduction and distribution of problem species through public education, posting signs at boat ramps, regular surveys of the water body, and enforcement of existing laws and regulations.

Lake Darpo



13. Lake Greenwood

(Greenwood and Laurens County)

1. Problem plant species
Slender naiad
Hydrilla
2. Management objectives
 - a. Reduce slender naiad in developed shoreline areas and areas of high public access and use.
 - b. Eliminate hydrilla from Rabon Creek arm and around Greenwood State Park.
3. Selected control method

<u>Problem Species</u>	<u>Control Agent</u>
Slender naiad, Hydrilla	Aquathol K
4. Area to which control is to be applied
Aquathol K - 40 acres of slender naiad infestation.

Aquathol K - 25 acres of hydrilla infestation in upper Rabon Creek arm.
5. Rate of control agents to be applied
Aquathol K - 0.5 - 4 ppm (about 3- 8 gallons per acre depending on depth)
6. Method of application of control agents
Aquathol K - Subsurface application by airboat with adjuvant.
7. Timing and sequence of control application
Agent to be applied to slender naiad when plants are actively growing.

Agent to be applied to hydrilla when plants are actively growing but prior to tuber production.
8. Other control application specifications
Herbicide used only upon approval by the S.C. Department of Health and Environmental Control.

Treatment of control area is to be conducted in a manner that will not significantly degrade water quality. Survey and final determination of treatment areas to be conducted in conjunction with the South Carolina Department of Natural Resources district fisheries biologist. In general, treatment will be limited to developed shoreline areas, public access sites, and areas of high public use.

Hydrilla may require multiple treatments.

9. Entity to apply control system
Commercial applicator

10. Estimated cost of control operations
\$25,325

11. Potential sources of funding

Greenwood County 50%

U.S. Army Corps of Engineers 0%

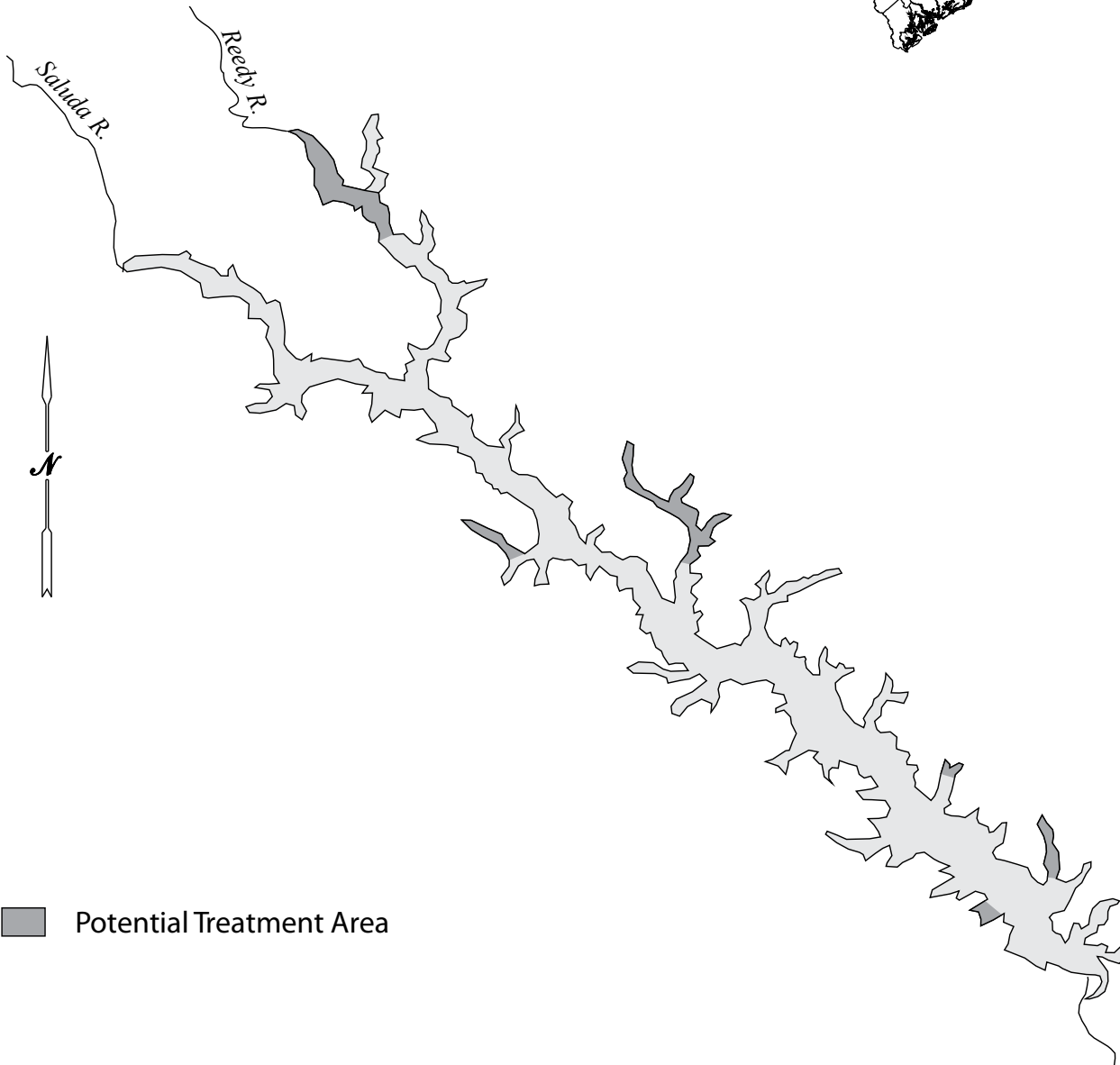
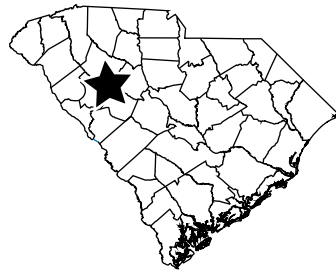
S. C. Department of Natural Resources 50%

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- b. Maintain or enhance native aquatic plant populations at levels beneficial to water use, water quality, and fish and wildlife populations through selective control of nuisance plant populations where feasible, introduction of native plant species where appropriate, and public education of the benefits of aquatic vegetation in general.
- c. Seek to prevent further introduction and distribution of problem species through public education, posting signs at boat ramps, regular surveys of the water body, and enforcement of existing laws and regulations.

Lake Greenwood



 Potential Treatment Area

